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Docket No. MWH-002905

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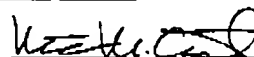
MAY 08 2003

**GROUP 1600**  
**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: Stephen B. Liggett  
Application No.: 09/856,803  
Filed: May 25, 2001 (35 U.S.C. § 371 of PCT/US99/27963, filed November 24, 1999, which claims benefit of U.S. Appl. No. 60/109,886, filed November 25, 1998)  
Confirmation No.: 3706  
Group No.: 1634  
Examiner: Myers, C.  
For: **POLYMORPHISMS IN THE 5' LEADER CISTRON OF THE  $\beta_2$ -ADRENERGIC RECEPTOR**

Commissioner for Patents

**Certificate of Facsimile Transmission**  
I hereby certify under 37 C.F.R. § 1.8 that this correspondence is being transmitted by facsimile to the United States Patent and Trademark Office, Commissioner for Patents, TC 1600, at (703) 872-9306, on May 7<sup>th</sup>, 2003.

  
Matthew M. Catlett

**RESPONSE TO OFFICE ACTION UNDER 37 C.F.R. § 1.111**

This paper is being submitted in response to the Office Action dated January 7, 2003 (PTO Paper No. 13), wherein the Examiner (1) withdraws the restriction requirement with respect to the inventions of Groups I (claims 1-8 and 11) and III (claims 13-15), and maintains the restriction requirement with respect to the inventions of Groups II (claims 9 and 10), IV (claims 14-16), V (claims 18, 28, and 29), VI (claims 19 and 20), VII (claims 19 and 20), VIII (claims 21 and 23), and IX (claims 26 and 27), both to each other and to the invention of Group I (now including claims 1-8, 11, and 13-15); and (2) rejects claims 1-8, 11, and 13-15 as being unpatentable under either 35 U.S.C. § 102(a), 35 U.S.C. § 102(b), or 35 U.S.C. § 103(a).

With regard to item (1), Applicant thanks the Examiner for withdrawing the restriction requirement with respect to the inventions of Groups I and III. However, Applicant disagrees

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with the Examiner's maintenance of the restriction requirement with respect to the inventions of Groups V (claims 18, 28, and 29) and IX (claims 26 and 27), both to each other and to the invention of Group I (now including claims 1-8, 11, and 13-15). Accordingly, Applicant has separately filed with the Commissioner for Patents a Petition Under 37 C.F.R. § 1.144 for Review of Requirement for Restriction. A copy of this Petition is attached.

With regard to item (2), Applicant responds as follows:

#### AMENDMENTS

Please amend the claims as follows:

1. (Amended) A method for genotyping the  $\beta_2$ AR gene of an individual, which comprises determining the identity of the nucleotide pair at the 5' leader cistron (5'LC) polymorphic site (PS) in the two copies of the  $\beta_2$ AR gene present in the individual, wherein the nucleotide pair is selected from the group consisting of: (a) cytosine and cytosine; (b) cytosine and thymine; and (c) thymine and thymine.

13. (Amended) A composition comprising at least one allele-specific oligonucleotide (ASO) that specifically hybridizes to a  $\beta_2$ AR polynucleotide at a region containing the 5'LC polymorphic site, wherein the ASO is not less than 10 nucleotides in length and not more than 100 nucleotides in length.